

PATENT

## IN THE CLAIMS

40. [New] A process to automatically translate a Formal Language Specification defining the functionality of a computer application modelled in a Conceptual Model, into a computer program called an application, said process comprising the steps of:

- A) validating said Formal Language Specification to ensure said Formal Language Specification is complete in that there is no missing information in said Formal Language Specification and to ensure said Formal Language Specification is correct in that primitives of said conceptual model are syntactically and semantically consistent and not ambiguous;
- B) translating said validated Formal Language Specification into computer readable code which has the capability to control a computer to provide a user interface access mechanism to allow users to log in by entering at least identification data and to use said identification data to authenticate and validate a user as an instance of a class of the validated Formal fFormal Language Specification that act as agent in at least one agent relationship;
- C) translating said validated Formal Language Specification into computer readable code which has the capability to control a computer to provide a view of the system defining the set of objects and attributes the user can query and the set of services said user can execute, the content of said system view depending on the identity of said user accessing said application;  
and
- D) translating said validated Formal Language Specification into computer readable code which has the capability to control a computer to provide user interface interaction mechanisms to interact with and execute the functionality of the application in terms of performing queries on information managed by said application and executing services to modify the state of said information managed by said application, said services comprising events, local transactions and global transactions.